

Docket No: 696-254 A

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

# PATENT OPERATIONS

In re Applicati	on of:	)		
Letzsc	h, Warren S.	) Group Art Unit: Not yet k		
Serial No.:	10/674,865	)		
T3'1 1	0 1 20 2002	)	Examiner: Not yet known	
Filed:	September 30, 2003	)		
		)		
For:	IMPROVED DEEP CATA	LYTIC	CRACKING PROCESS	

New York, N.Y. 10036 January 7, 2004

Mail Stop DD Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT

#### SIR/MADAM:

Request is hereby made for consideration of this information disclosure statement. The following references are being cited under 37 C.F.R. § 1.97.

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> Mail Stop DD Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

On January 7, 2004

Alan B. Clement, Reg. No. 34,563

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Document Designation	Relevance
AA (U.S. 4,980,053)	Relates to production of gaseous olefins by catalytic conversion of hydrocarbons.
AB (U.S. 5,009,769)	Relates to process for catalytic cracking of hydrocarbons.
AC (U.S. 5,043,058)	Relates to quenching downstream of an external vapor catalyst separator.
AD (U.S. 5,232,675)	Relates to rare earth-containing high-silica zeolite having penta-sil structure and process for the same.
AE (U.S. 5,326,465)	Relates to process for the production of LPG rich in olefins and high quality gasoline.
AF (U.S. 5,380,690)	Relates to cracking catalyst for the production of light olefins.
AG (U.S. 5,565,176)	Relates to catalytically cracking paraffin rich feedstocks comprising high and low concarbon components.
AH (U.S. 5,670,037)	Relates to process for producing light olefins by catalytic conversion of hydrocarbons.
AI (U.S. 5,766,558)	Relates to fluid catalytic cracking process and apparatus.
AJ (U.S. 5,981,818)	Relates to integrated cracking and olefins derivative process utilizing dilute olefins.
AK (U.S. 6,010,618)	Relates to FCC process with two zone short contact time reaction conduit.
AL (U.S. 4,892,643)	Relates to upgrading naptha in a single riser fluidized catalytic cracking operation employing a catalyst mixture.
AM (U.S. 5,087,349)	Relates to process for selectively maximizing product production in fluidized catalytic cracking of hydrocarbons.

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AN (U.S. 5,196,172) Relates to apparatus for the fluid catalytic

cracking of hydrocarbon feed employing a separable mixture of catalyst and sorbent

particles.

AO (U.S. 5,314,610) Relates to staged catalytic cracking process.

BA (EP 1046 696 A2) Relates to a catalytic conversion process for

producing isobutene and isopuraffine - enriched

gasoline.

Full text copies for the prior art are enclosed herewith. It is respectfully requested that this art be considered by the Examiner in the above-identified application and made of record therein.

It is believed that no fee is required for the submission of this Information Disclosure Statement under 37 C.F.R. § 1.97 (b). However, if a fee is due, the Commissioner is hereby authorized to charge it to deposit account 08-1540.

Respectfully submitted,

Alan B. Clement

Registration No. 34,563

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of

Complete if Known					
Application Number	10/674,865				
Filing Date	September 30, 2003				
First Named Inventor	Letzsch, Warren S.				
Group Art Unit	Not yet known.				
Examiner Name	Not yet known.				
Attorney Docket Number	696-254A				

U.S. PATENT DOCUMENTS							
Examiner Initials*			Document Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	AA	4,980,053		Li et al.	12/25/1990		
	AB	5,009,769		Goelzer	04/23/1991		
	AC	5,043,058		Forgac et al.	08/27/1991		
	AD	5,232,675		Shu et al.	08/03/1993		
	AE	5,326,465		Yongqing et al.	07/05/1994		
	AF	5,380,690		Zhicheng et al.	01/10/1995		
N.	AG	5,565,176		Johnson et al.	10/15/1996		
	AH	5,670,037		Zaiting et al.	09/23/1997		
	ΑI	5,766,558		Letzsch et al.	06/16/1998		
	AJ	5,981,818		Purvis et al.	11/09/1999		
	AK	6,010,618		Lomas	01/04/2000		
	AL	4,892,643		Herbst et al.	01/09/1990		
	AM	5,087,349		Goelzer et al	02/11/1992		
	AN	5,196,172		Weinberg et al.	03/23/1993		
	AO	5,314,610		Gartside	05/24/1994		
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	FOREIGN PATENT DOCUMENTS										
Examiner Initials*	Cite No.1	Office		reign Pate Number			Code <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
	BA		EP	1046	696	A2		Xu et al.	10/25/2000		-
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Examiner	Date	
Signature	Considered	

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.